Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's	)	ET Docket No. 95-183
Rules Regarding the 37.0-38.6 GHz and	)	RM-8553
38.6-40.0 GHz Bands	)	
	)	
Implementation of Section 309(j) of the	)	
Communications Act -- Competitive	)	PP Docket No. 93-253
Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz	)	
	)	

Comments of AT&T Wireless Services, Inc.

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AT&T Wireless Services, Inc. (hereinafter "AT&T"), by its attorney, hereby files its comments in the above-captioned *Notice of Proposed Rule Making and Order.*[1] In support of its comments AT&T states the following:

I. Introduction and Summary

AT&T supports the Commission's proposed allocation of spectrum in the 37.0-38.6 GHz band ("37 GHz band"). As the Commission recognizes, it is especially important for PCS licensees to have access to spectrum suitable for backhaul and backbone operations. With regard to the proposed allocation, AT&T believes the Commission should set-aside a certain quantity of 37 GHz band spectrum for application by broadband PCS licensees and the remaining 37 GHz band spectrum should be available

[1] *In the Matter of Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Bands and Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, 37.0-38.6 GHz and 38.6-40.0 GHz*, Notice of Proposed Rule Making and Order, ET Docket No. 95-183 and PP Docket No. 93-253, FCC 95-500, 61 FR 02452, __ FCC Rcd ___, (December 15, 1995) (hereinafter "NPRM").

for application by other entities, including but not limited to, CMRS and non-CMRS providers alike. The Commission should provide 37 GHz band licensees with technical and operational flexibility so they can provide numerous services within their discrete spectrum blocks. To help to ensure that the spectrum is used as efficiently as possible, the Commission should allow 37 GHz band spectrum to be disaggregated and service areas to be geographically partitioned. Because a variety of different services may be offered or provided by 37 GHz band licensees, it is necessary to tailor build-out requirements to the type of service offering or use to which the spectrum is put. However, with respect to new services such as broadband PCS whose licensees will use the 37 GHz band spectrum primarily as intermediate links for backhaul/backbone purposes, any build-out schedules imposed should be consistent with build-out requirements of the underlying service offering.

The proposal for the 38.6-40.0 GHz band ("39 GHz band") presents different issues for consideration. AT&T supports the Commission's decision to process in the normal course, applications filed as of November 13, 1995, which are not mutually exclusive. In this regard, AT&T believes the FCC should provide an opportunity for applicants who have mutually exclusive applications on file as of that date to voluntarily negotiate agreements which will eliminate mutual exclusivity. Such a course of action will enable the FCC to process additional pending applications for 39 GHz band facilities which are critical to the rapid deployment of A and B block broadband PCS services. The proposed 18 month build-out certification required in order for 39 GHz band incumbents to retain their rectangular service areas should be modified to reflect the type of use to

which the 39 GHz band facilities will be put. For authorized or pending 39 GHz band applications which will be processed under existing guidelines and which will be used as intermediate links for broadband PCS backhaul/backbone purposes, the construction certification should not be based on an 18 month timetable. Rather, the construction certification should be tied to the 5 year build-out requirement for the underlying broadband PCS license in question.

II. 37 GHz Spectrum

A. 37 GHz Allocation

AT&T fully supports the Commission's proposal to allocate the 37 GHz band into 14 paired channels 50 MHz in each direction and 4 50 MHz unpaired channels. As the Commission has recognized in this and other proceedings, there is a critical need for the broadband PCS industry to have access to sufficient spectrum for backhaul/backbone purposes to make the provision of PCS service a reality at competitive costs. Indeed, 102 A and B block broadband PCS licenses have already been issued, an auction for 493 C block broadband PCS licenses is currently underway, and auctions for the 1,479 D, E and F block broadband PCS licenses should commence in the relatively near future.

Due to a significant influx of applications for spectrum in the 39 GHz band by non-CMRS providers which pre-dated the completion of the A and B block broadband PCS auction, existing broadband PCS licensees have generally not been able to obtain licenses for spectrum in the 39 GHz band for backhaul/backbone purposes. Though it is possible for A and B block broadband PCS licensees to obtain service from non-CMRS providers, this is not an ideal long-term solution for the broadband PCS industry. The inability to

control one's own spectrum has two disadvantages. First, taking service from a non-CMRS common carrier will significantly increase the cost of providing PCS service. Increased costs of providing service, which may have to be passed on to subscribers, will make it more difficult for broadband PCS licensees to be competitive with incumbent broadband CMRS providers. Second, taking service from non-CMRS common carriers will not enable broadband PCS service providers to react quickly to competitive circumstances and to modify backhaul/backbone facilities as demanded thereby.[2]

In addition to the 2,074 broadband PCS licensees who need spectrum for backhaul/backbone operations, the spectrum proposed to be made available can be efficiently used for a variety of purposes by other broadband and narrowband CMRS providers as well as non-CMRS providers. Accordingly, AT&T believes that the Commission's proposed allocation of 37 GHz band spectrum will go a long way towards meeting the spectrum demand for CMRS and non-CMRS users.

B. Market Size

AT&T supports the Commission's proposal to use the BTA as the market size for 37 GHz band licenses. AT&T anticipates that licenses for 37 GHz band facilities will be sought by numerous broadband PCS licensees who have no access to other spectrum reasonably suitable for backhaul/backbone links. In addition, based on the historical use of the 39 GHz band, it appears that non-CMRS common carriers that obtain 37 GHz band licenses will market their facilities to PCS licensees for backhaul/backbone services. It is

[2] For example, a broadband PCS provider would first have to engage in negotiations with one or more non-CMRS common carriers on a variety of provisions including, but not limited to, the terms and price of service. This would engender a substantial delay in deploying the required backhaul/backbone facilities.

likely, therefore, that one significant use of the 37 GHz band will be for broadband PCS backhaul/backbone. Inasmuch as broadband PCS licenses are issued on an MTA and BTA basis, and MTAs are comprised of numerous BTAs, it is appropriate for the Commission to issue 37 GHz band licenses on a BTA basis.

C. 37 GHz Band Set-Aside

Because there is a critical need for backhaul/backbone spectrum for existing and prospective broadband PCS licensees, there should be a broadband PCS set-aside in the 37 GHz band. AT&T proposes that the Commission specifically set-aside 9 of the 14 paired broadband PCS channels for the exclusive application by and use of broadband PCS licensees. The remaining 5 paired channels and the 4 unpaired channels should be available for application by any entity, including the full range of CMRS providers and non-CMRS entities.[3]

The 37 GHz band set-aside described above should be for a limited duration. AT&T suggests that only broadband PCS licensees be eligible to file short form applications for the 9 set-aside channels. Because the broadband PCS auctions have not been completed for all spectrum blocks, AT&T further suggests that the filing of the short form applications for 37 GHz facilities be deferred until such time as the remaining broadband PCS auctions are completed and licenses for the C-F blocks are awarded.[4] To

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[3] All broadband PCS licensees should be eligible to apply for this spectrum.

[4] To the extent the Commission chooses not to allocate 37 GHz licenses by using competitive bidding techniques there should still be a set-aside for broadband PCS licensees. However, instead of using the short-form application, the Commission should accept applications only from A-F block broadband PCS licensees during a specified filing window. The broadband PCS filing window for the 9 set-aside channels would commence on the day the FCC grants the last C, D, E or F block broadband PCS license and would expire 60 days thereafter. After the filing window expired, any set-aside channels not applied for would be available for application by any CMRS or non-CMRS entity.

the extent there are fewer short-form applications filed than channels available, the FCC should award licenses to those broadband PCS applicants who applied therefor and the remaining 37 GHz channels should be made available for application by any non-broadband PCS licensee or non-CMRS entity. The proposal has a number of advantages.

First, since the FCC has properly recognized that there is a need for backhaul/backbone spectrum for broadband PCS services and the 37 GHz band is ideally suited to meet those needs, the proposal ensures that broadband PCS licensees have an opportunity to obtain the spectrum they need in order to promptly deploy broadband PCS services at reasonable prices. Second, the proposal does not preclude non-broadband PCS licensees (including other CMRS providers and non-CMRS entities) from applying for and receiving authorizations for significant amounts of 37 GHz spectrum. Third, the set-aside is only in effect for as long as it takes broadband PCS licensees to plan their backhaul/backbone systems and to get applications for such facilities on file with the Commission.

D. Build-Out Requirements

Build-out rules and/or performance standards are required by the Communications Act to ensure that spectrum awarded pursuant to competitive bidding procedures is (1) made available to rural areas and (2) is not warehoused. At least with respect to broadband PCS use of 37 GHz band facilities, build-out rules are not necessary.

Broadband PCS licensees are already under an obligation to provide service to a certain percentage of the population of their licensed MTA or BTA within 5 years and 10

years of the award of their initial licenses.[5] The build-out requirement for the underlying broadband PCS license ensures that service will be provided to substantial portions of the BTA or MTA, including service to rural areas. Moreover, because a primary use of the 37 GHz band will be to support PCS operations, the Commission can be assured that 37 GHz band spectrum will not be warehoused by broadband PCS licensees. Broadband PCS licensees have paid or will pay significant sums through the auction process to obtain their service licenses. In order to meet the Part 24 PCS build-out requirements, broadband PCS licensees will need to deploy intermediate links without delay. Assuming the Commission ultimately adopts its tentative conclusion to use competitive bidding techniques to award 37 GHz band licenses, broadband PCS licensees will also have to pay for the right to use 37 GHz band spectrum. The fact that broadband PCS licensees have pre-existing Part 24 build-out obligations and will have paid substantial sums for Part 24 and 37 GHz licenses, virtually eliminates any possibility that 37 GHz band spectrum will not be put to productive use at the very earliest possible time. Based on the foregoing, AT&T does not believe it is necessary for the Commission to adopt build-out rules for 37 GHz facilities licensed to broadband PCS licensees.

To the extent the Commission believes some build-out requirement is necessary, it should not be based on construction of an arbitrary number of links in a given geographic area. Broadband PCS licensees who use 37 GHz spectrum for intermediate

[5] A, B and C block licensees are required to construct sufficient facilities to provide coverage to one-third and two-thirds of the population within their service areas within 5 years and 10 years, respectively of the initial license grant. D, E and F block licensees are required to construct sufficient facilities to provide coverage to 25% of the population within their service areas within 5 years after initial licensing or demonstrate they are providing "substantial coverage" to the service area within 5 years after initial licensing.

backhaul/backbone links need some degree of flexibility to deploy links in a manner which is consistent with and follows the configuration of their systems' base station and switching facilities. Due to the vagaries of system design and marketing plans, it may not be possible for broadband PCS licensees to build a pre-established number of links within a specified geographic area in a short period of time after licensing. In fact, while broadband PCS licensees know they will need to utilize 37 GHz spectrum for backhaul/backbone links, they may not know for some time where those links will actually be needed. Furthermore, requiring broadband PCS licensees to build an arbitrary number of links in advance of the finalization of their system design will merely force PCS licensees to construct potentially unnecessary and expensive facilities in order to preserve their 37 GHz band licenses. Accordingly, to the extent a build-out rule is imposed, AT&T suggests that a more permissive standard be used. AT&T supports a build-out rule which requires broadband PCS licensees to demonstrate to the Commission that "substantial use" is being made of the 37 GHz spectrum in the BTA in question.

To the extent the Commission adopts build-out rules which require broadband PCS licensees to demonstrate they have met a "substantial use" standard, such showings should be required at the time broadband PCS licensees submit documentation to the Commission demonstrating they have met the required 5 year build-out requirement for the underlying broadband PCS license. Tying a 37 GHz band build-out rule to the 5 year PCS build-out rule ensures that the Commission will have a better picture of how much progress individual PCS licensees have made in the construction and deployment of 37 GHz band facilities.

E. Technical and Operational Flexibility

37 GHz band licensees should be afforded full technical and operational flexibility within their licensed service areas subject to the provision that operation of 37 GHz band facilities do not cause interference to co-channel licensees in adjacent BTAs or to adjacent channel licensees. Though one primary use of the 37 GHz band will be for CMRS backhaul/backbone operations, providing 37 GHz licensees with full technical and operational flexibility will enable such licensees to take advantage of innovations which may make it possible to use the same spectrum for new and additional services.

The Commission has been moving in the direction of allowing its licensees greater technical and operational flexibility within their respective service blocks and there is no reason for the Commission not to allow 37 GHz band licensees the same flexibility. For example, the Commission has recently initiated a NPRM[6] proposing to allow CMRS providers to offer wireless local loop services on a co-primary basis with mobile services. In addition, in the context of DBS, the FCC recently amended its rules[7] to enable DBS licensees to offer non-DBS services over a substantial portion of its DBS capacity. AT&T suggests the same rationale that applies to the CMRS/wireless local loop and DBS proceedings should be applicable to 37 GHz band licensees.

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[6] *In the Matter of Amendment of the Commission's Rules To Permit Flexible Service Offerings in the Commercial Mobile Radio Services,* WT Docket No. 96-6, Notice of Proposed Rule Making, FCC 96-17, 61 FR 06189, __ FCC Rcd ___ (1996).

[7] *In the Matter of Revision of Rules and Policies for the Direct Broadcast Satellite Service,* IB Docket No. 95-168, PP Docket No. 93-253, Report and Order, FCC 95-507, 60 FR 65587, __ FCC Rcd ___ (1995).

F. Spectrum Disaggregation/Geographic Partitioning

Despite the need for 37 GHz spectrum and the need for geographic licenses which are based on BTAs, 37 GHz licensees may find after time that they are not using all of their allocated spectrum in all of their geographic service areas. Similarly, some potential applicants for 37 GHz band licenses may not have an immediate need for all of the spectrum throughout an entire BTA. Rather than committing Commission resources to administrative procedures involved in re-taking some or all of the spectrum in some or all parts of a 37 GHz band license area and then re-allocating the spectrum or geographic area, AT&T suggests the Commission allow marketplace forces to assume some of that responsibility. This can be accomplished if the FCC allows 37 GHz band licensees to disaggregate the spectrum for which they are licensed and to geographically partition their licensed service areas. Disaggregation and partitioning should be allowed by permitting entities to form bidding consortia before an auction takes place or by permitting 37 GHz band licensees to negotiate disaggregation and/or partitioning agreements subsequent to the completion of the auction.

Allowing 37 GHz band licensees to disaggregate spectrum and partition licensed service areas also serves to ensure that small entities, including but not limited to, designated entities and rural telcos, will be able to obtain 37 GHz band spectrum for more narrowly defined needs. Lastly, allowing spectrum disaggregation and geographic partitioning is consistent with, and enhances the ability of, 37 GHz band licensees to have operational flexibility as discussed in Section II(E) above.

III. 39 GHz Band Issues

A. Treatment of Incumbents

AT&T fully supports the Commission's decision to process non-mutually exclusive 39 GHz band applications on file as of November 13, 1995, under existing processing guidelines for two reasons. First, the proposal is equitable. Second, and more importantly, following existing processing guidelines for non-mutually exclusive applications filed before the FCC imposed a freeze on the acceptance of additional 39 GHz band applications, will serve to ensure the rapid deployment of broadband PCS services since many of the pending 39 GHz applications are (a) applications of A and B block PCS licensees who intend on using the 39 GHz band for backhaul/backbone facilities for their PCS systems[8] or (b) applications of non-CMRS common carriers who intend to provide backhaul/backbone facilities for PCS service providers.

AT&T also supports the Commission's proposed policy which will protect the rectangular service area of an incumbent 39 GHz band licensee only to the extent the licensee certifies that it has constructed and is operating at least 4 permanently installed links per 100 square kilometers. However, AT&T asserts that with respect to broadband PCS licensees, the requirement that construction and operation be accomplished within 18 months of the adoption of a Report and Order in this proceeding, is inappropriate. Instead, AT&T suggests that for A and B block PCS licensees only, the time within which any construction certification needs to be made is the time at which the A or B block PCS licensee submits its Part 24 five year construction benchmark showing. As noted in

[8] AT&T Wireless PCS Inc. has numerous 39 GHz applications pending for each of the MTAs in which it was awarded a license for an A or B block broadband PCS system.

Section II(D) above with respect to the 37 GHz band, broadband PCS licensees will use 39 GHz facilities primarily for backhaul/backbone purposes. It makes more sense to evaluate whether a broadband PCS licensee has substantially used its 39 GHz authorization to such an extent that it can keep its original "rectangular" service area at the same time it is required to demonstrate to the Commission that it has met its 5 year PCS build-out requirement. Use of the 5 year PCS build-out benchmark rather than an 18 month benchmark will also ensure that PCS entities are not compelled to construct potentially unnecessary link facilities merely to grandfather their originally selected rectangular service areas.

Incumbent 39 GHz applicants or licensees that are not broadband PCS licensees should be held to the Commission's proposed 18 month certification rule. Unlike the 37 GHz band where auctions are likely to be used to allocate licenses thereby creating economic disincentives to warehousing spectrum, 39 GHz incumbents whose applications or already granted authorizations are being processed under the rules in effect at the present time, do need to be held to a stricter build-out standard to ensure that spectrum is put to productive purposes at the earliest possible time.

B. Treatment of Mutually Exclusive Applications

As noted above, AT&T supports the Commission's decision to process in the normal course, those non-mutually exclusive applications which were filed with the Commission on or before November 13, 1995. AT&T agrees that processing of those applications can be accomplished without placing any significant burden on Commission resources. AT&T recommends, however, that the FCC clarify its policy by expressly

allowing parties with mutually exclusive applications which were placed on public notice prior to September 14, 1995, to eliminate the mutually exclusive situations by voluntary agreement. To ensure that such voluntary negotiations are carried out quickly and do not delay Commission action on the processing of 39 GHz applications in general, AT&T asserts that parties be required to resolve any mutually exclusive situations and to amend their applications within 120 days of the adoption of a Report and Order in this proceeding. As an exception to the Commission's freeze on accepting for filing amendments or modifications to pending 39 GHz applications, AT&T suggests that the Commission specifically allow amendments or modifications to be filed to the extent they advise the Commission that mutual exclusivity between two or more applicants has been eliminated. This limited modification to the 39 GHz band processing freeze will not place any additional burden on Commission resources. It may, however, eliminate mutually exclusive situations which will allow additional 39 GHz applications to be granted, which, in turn, may result in A and B block PCS licensees being able to deploy broadband PCS services at the earliest possible time.

IV. Frequency Coordination Matters

The Commission proposes to require 37 GHz band co-channel licensees to engage in prior frequency coordination to ensure that links do not interfere with one another:

> Specifically, we propose to let licensees coordinate among themselves at their service area borders regarding co-channel interference protection and at the channel block edges regarding adjacent channel interference protection. We believe that such a coordination process would be simpler and more efficient, due to the relatively large service areas that we are proposing.[9]

[9] NPRM, para. 117.

The Commission also recognizes that since 37 GHz links are proposed to be licensed on a BTA basis with each licensee being able to deploy links within the geographic license area without prior approval subject to compliance with appropriate technical rules, it will not have information in its database about individual 37 GHz links which are in operation. Accordingly, it asks for comment on procedures or methods that might be adopted to facilitate coordination between licensees of adjacent BTAs.[10]

AT&T submits that all 37 GHz licensees should be required to maintain a machine readable database which contains sufficient information in a standardized format to enable other parties to make determinations on whether deployment of specific facilities will or will not pose interference problems. In this regard, AT&T notes that the FCC has already proposed that such technical information be maintained by 37 GHz licensees for the purpose of performing frequency coordinations with Government fixed applicants and licensees, when necessary

However, rather than just being required to maintain this information in machine readable format, AT&T submits that the Commission should adopt rules which require 37 GHz licensees to periodically submit this information to the Commission so it can be accessed for purposes of determining what specific facilities are or are not in operation. Frequency coordination data submitted pursuant to this proposed rule should at a minimum, identify the licensee; identify the person in the licensee organization that is responsible for frequency coordination matters; provide the information described in paragraph 120 of the NPRM; and provide the date on which a given link commenced

[10] NPRM, n. 192.

operating and the date on which a given link was taken out of service.[11] To ensure that the relevant information is readily available to all parties that need such information, AT&T asserts that the information should be submitted directly to a specific address at the FCC's Internet site (FCC.GOV) in a standardized format.

Though somewhat different considerations exist with respect to 39 GHz links due to the fact that the FCC has an established database of pending applications and authorizations, the Commission proposes to license 39 GHz facilities on a BTA basis. Thus, AT&T believes similar rules should be applied to 39 GHz facilities on a going-forward basis.

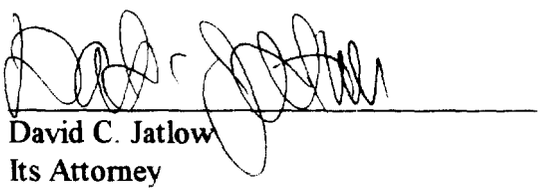
Access to this information at a particular FCC.GOV Internet site will enable all parties to have relevant and up to date 37/39 GHz link information and will serve to ensure that all parties subject to prior coordination requirements operate from a common

[11] The specific information required, the dates on which such information should be submitted and other details related to the mechanics of such a rule, should be considered by appropriate industry groups such as NSMA and TIA. When such groups have reached a consensus on the specific information that should be included, they should advise the Commission of their findings and recommendations.

database. This will reduce the possibility of errors which can occur when non-controlled multiple databases are used.

Respectfully submitted,

AT&T Wireless Services, Inc.



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